

understands the general subject of the '637 patent to be "foamable golf ball covers," not polyurethane golf ball covers:

- Q. What's your understanding of what the Molitor '637 patent relates to?
- A. Foam covered golf balls.

[Halkowski Decl. Ex. 5, 4/5/07 Michael Sullivan Dep. Tr. at 86:15-17.]

Acushnet's expert witness, Dr. MacKnight, also agreed that the general subject matter of the '637 patent was "foamed" golf ball covers:

- Q. . . . Having looked over the '637 patent just now, how would you characterize the general subject matter of that patent?
- A. The patent has to do again with a cover.
- Q. What kind of cover?
- A. A cellular foamable cover I think is how it's described. In other words, it's a synthetic polymeric cover which can be foamed.
- Q. The covers Molitor is describing are foamable, or are they are in fact foamed?
- A. They're foamable, and I think in all cases that he described it, they're foamed, the examples.

[Halkowski Decl. Ex. 1, MacKnight Dep. Tr. at 68:3-14.]

Thus, there can be no genuine dispute that those of skill in the art would *not* interpret Nesbitt's mention of the Molitor patent to include, with "detailed particularity," a reference to polyurethane golf ball covers. Rather, one of skill in the art would understand Nesbitt's citation of Molitor to refer to Molitor's general teachings about foamed golf ball covers. Even if one thought Nesbitt to incorporate by reference a particular class of materials disclosed in the '637 patent, that class of materials would be ionomer foams, not polyurethane foams, especially given that Nesbitt introduces Molitor with a specific preference for ionomers.

2. Nesbitt Does Not Clearly Indicate Where in the Molitor Patent the Allegedly Incorporated Disclosure Can Be Found.

For Nesbitt '193 to incorporate by reference Molitor's disclosure of polyurethane golf ball covers, it would not only have to identify such covers with "detailed particularity" – which it

does not – but would also have to "clearly indicate where that material is found" within the Molitor patent. *Advanced Display*, 212 F.3d at 1282. Because Nesbitt does not identify any specific part of the Molitor '637 patent – relating to polyurethanes or otherwise – the second prong of the *Advanced Display* test also precludes a finding that Nesbitt incorporates polyurethane by reference.

As discussed in the previous section, Nesbitt's patent does not "clearly indicate" any particular portion of the Molitor '637 patent. All Nesbitt says is that ionomer resins are preferred, and that Molitor discusses "foamable compositions." [Halkowski Decl. Ex. 3, '193 patent, col. 3:54-58.] Molitor, likewise, states a preference for making foamed golf ball covers from ionomer resins, and discloses other possible cover compositions as merely "suitable." [Halkowski Decl. Ex. 2, '637 patent, col. 5:30.] Molitor does not suggest that any of these merely "suitable" compositions is any more useful or desirable than any other.

Had Nesbitt in fact wished to incorporate Molitor's mention of polyurethane – and, from the deposition testimony quoted above, it is clear he did not – it would have been simple for him to do what the law requires, instead of making a general reference to Molitor's omnibus collection of "foamable compositions." The golf balls Molitor describes as Examples 16-19 have polyurethane covers, so if Nesbitt had wished to call attention to these specific cover compositions, rather than foamable ionomer compositions, or foamable compositions generally, it would have been straightforward for him to "clearly indicate" these particular examples. [*See id.* col. 18:31-19:10.]

Because Nesbitt does not clearly indicate where polyurethane is discussed within the Molitor '637 patent, the law does not permit a finding that Molitor's mention of polyurethane is incorporated by reference into Nesbitt's patent. Thus, it is appropriate to grant summary

judgment that Nesbitt does not anticipate claims 1, 2, 4, and 5 of the '293 patent; claims 1-11 of the '156 patent; claims 4-5 of the '130 patent; and claims 1 and 3 of the '873 patent – each of which requires an outer cover comprising polyurethane.

B. The Limitation of "An Outer Cover Having a Shore D Hardness of 64 or Less" Is Not Inherently Disclosed in Any of Acushnet's Prior Art Patents.

1. Nesbitt Does Not Inherently Disclose an Outer Cover Layer Having a Shore D Hardness of 64 or Less Because "Plaque" Hardness is Not Representative or Predictive of On-the-Ball Hardness.

In addition to requiring that the outer cover layer comprises a polyurethane-based material – which Nesbitt lacks – the majority of the asserted claims also require that the outer cover layer of the golf ball have a "Shore D hardness" of 64 or less. The Nesbitt '193 patent does not disclose any Shore D hardness for the outer cover layer. Accordingly, the Nesbitt patent cannot anticipate those asserted claims.

Acushnet nevertheless attempts to make an anticipation argument by looking to documents outside of the Nesbitt patent in an attempt to show that the *material* that Nesbitt discloses for the outer cover layer *inherently* has a Shore D hardness in the claimed range. The fundamental flaw in Acushnet's argument is that the hardness value Acushnet cites is the hardness of the *material used to make* the outer cover layer, not the hardness of the *outer cover "layer" itself*, which is what is required by the claim language.⁶ Even Acushnet's witnesses and documents confirm that the two values are not at all the same and that there is no way to

⁶ The claims generally recite "A golf ball comprising . . . an outer cover layer having a Shore D hardness of 64 or less." On its face, the language is clearly referring to the hardness of the *layer* on the golf ball, not the hardness of the raw material before the layer was formed, and the specification bears out that construction. Nevertheless, Acushnet has taken the position in claim construction that the limitation refers to a measurement of the raw material measured "on a plaque" before the outer cover layer is formed. Accordingly, this will be an issue before the Court in the claim construction process.

correlate the two. Accordingly, Acushnet's cited material values are irrelevant to the issue of whether the *outer cover layer* of Nesbitt has a hardness that falls within the claimed range.

Acushnet notes that the Nesbitt '193 patent discloses that the outer cover is made of an ionomer, Surlyn 1855, which is made by DuPont and has a variety of commercial applications apart from golf balls. The Surlyn datasheet Acushnet cites – which, as the parties agree, reports hardnesses of the raw materials measured on standard plaques – states a Shore D hardness of 55 for Surlyn 1855. [Halkowski Decl. Ex. 6, Surlyn Datasheet.⁷] What the datasheet does not state – and indeed could not state – is what the hardness would be of a golf ball outer cover layer that is formed from that material *and* that: (1) has a thickness as described in the Nesbitt patent (0.020 to 0.100 inches) that is much smaller than the 0.25 inches of a standard plaque; (2) is formed on top of a harder inner cover layer such as that described in the Nesbitt patent; and (3) has gone through the material processing steps required to turn the raw material into a golf ball cover layer.

Because Nesbitt does not expressly or inherently disclose an outer cover with a Shore D hardness of 64 or less, Nesbitt cannot anticipate any of the claims that include this limitation: claims 1, 2, 4, and 5 of the '293 patent; claims 1-3 of the '156 patent; claims 1-2 of the '130 patent, and claims 1 and 3 of the '873 patent.⁸

a. Hardness is Not a Fundamental or Inherent Property of a Polymer Composition.

As Acushnet's own expert, Dr. William MacKnight, explained in his deposition, "Shore hardness measurements don't measure [a] fundamental property of the material"

⁷ Surlyn 1855 has been renamed Surlyn 9020. This datasheet refers to the latter.

⁸ The only asserted claims that do not specify a Shore D hardness measurement for the outer cover layer are claims 4, 6-8, and 10-11 of the '156 patent. Each of those claims does require, however, that the outer cover layer comprises a polyurethane material; therefore, Nesbitt cannot anticipate those claims for the reasons discussed in Section A above.

[Halkowski Decl. Ex. 1, MacKnight Dep. Tr. at 93:19-94:1.] In other words, the Shore D hardness of a material is not dependent simply on its composition. [*Id.* at 95:20-23; 104:3-7.]

Q. So the Shore D hardness of a material is not dependent simply on what that composition is, right?

A. Correct.

[*Id.* at 95:20-23.]

In particular, the hardness of a sample is affected by the size and shape of the sample. Therefore, a "plaque" or "slab" Shore D measurement, such as that listed on a manufacturer's datasheet, is not the same as a measurement of the same composition when formed into the inner or outer cover layer of a golf ball. Acushnet, through its patents, has conceded that those of skill in the art know that on-the-ball measurements differ from plaque measurements. The following excerpt appears in U.S. Patent No. 6,960,630, which is an Acushnet patent and lists among its inventors Chris Cavallaro, who is responsible for all of the accused products in this case:

It should be understood, especially to one of ordinary skill in the art, that **there is a fundamental difference between "material hardness" and "hardness, as measured directly on a golf ball."** Material hardness is defined by the procedure set forth in ASTM-D2240 and generally involves measuring the hardness of a flat "slab" or "button" formed of the material of which the hardness is to be measured. **Hardness, when measured directly on a golf ball (or other spherical surface) is a completely different measurement and, therefore, results in a different hardness value.** This difference results from a number of factors including, but not limited to, ball construction (i.e., core type, number of core and/or cover layers, etc.), ball (or sphere) diameter, and the material composition of adjacent layers. **It should also be understood that the two measurement techniques are not linearly related and, therefore, one hardness value cannot easily be correlated to the other.**

[Halkowski Decl. Ex. 7, U.S. Patent No. 6,960,630, col. 10:8-24 (emphasis added).]

Another of Acushnet's experts, Dr. Robert Statz, also confirmed that, because of the differences in thickness between a golf ball cover and a test plaque, the hardness measured on one can differ from the hardness measured on the other:

- Q. You do agree the values can be different between a plaque measurement and an on-the-ball measurement?
- A. Provided you take thickness into account, yes.

[Halkowski Decl. Ex. 8, 8/1/07 Robert Statz Dep. Tr. at 300:7-11.]

Also, unlike the hardness measured on a plaque, the hardness measured on a golf ball cover layer is often affected by the hardness of whatever cover or core material lies underneath it. Jeffrey Dalton, who is Acushnet's Vice-President of Intellectual Property, an inventor of dozens of Acushnet golf ball patents, and who was Acushnet's Rule 30(b)(6) witness in this case, explained:

- Q. Is the Shore D measurement, contrasting slab Shore D versus on-the-ball Shore D, is it a function of thickness?
- A. I think a number of things come into play in the difference between Shore D on the ball versus on the slab or on a test specimen. The test specimens are certainly thicker than what you get on a ball, and I think that that's part of it. The -- on the ball **you also have an influence of what's underneath the layer** that you're trying to measure so that if you have a -- as is often the case, **if you have a soft layer, particularly if it's a thin soft layer, residing on a harder layer, higher Shore D layer, then that number may be -- the number that you measure might be higher than what you would get from a slab made of the same material.**

[Halkowski Decl. Ex. 9, 3/27/07 Jeffery Dalton Dep. Tr. at 59:7-25 (emphasis added).]

Finally, a plaque Shore D hardness cannot be used to predict an on-the-ball hardness. Dr. MacKnight testified that although it might be possible to predict on-the-ball Shore D hardnesses "within very general ranges" based on the properties of the cover material, "there isn't generally a

theoretical method of predicting what the values would be." [Halkowski Decl. Ex. 1, MacKnight Dep. Tr. at 93:19-94:1.]

Thus, there can be no genuine dispute that the "plaque" Shore D hardness reported on a polymer datasheet neither represents nor predicts the hardness that would be measured on a golf ball layer made from that composition.

b. Acushnet Can Prove No More Than a "Possibility or Probability" That Nesbitt's Outer Cover Layer Would Have a Shore D Hardness of 64 or Less, Which is Not Enough to Show That Property is Inherently Disclosed.

Acushnet contends that Nesbitt inherently discloses an outer cover layer having a Shore D hardness of 64 or less because Nesbitt teaches making the outer cover layer from Surlyn 1855, an ionomer that, according to its datasheet, has a Shore D hardness of 55. [Halkowski Decl. Ex.13, Request for Inter Partes Reexamination of '293 Patent, at 19.] The datasheet represents Acushnet's only basis for arguing inherency; Acushnet has no other evidence suggesting what Nesbitt's actual outer-cover hardness was or would be.

As explained above, the Shore D hardness reported on the Surlyn 1855 datasheet is measured from a plaque, and is therefore not the Shore D hardness of the outer cover layer of Nesbitt's golf ball. [See Section V.B.1 above.] Also, as Acushnet's Rule 30(b)(6) witness, Mr. Dalton, testified, the Shore D hardness of a golf ball cover layer can be *higher* than the plaque hardness. [Halkowski Decl. Ex. 9, Dalton Dep. Tr. at 59:10-25.] For example, Acushnet's own documents show that, for the accused products,

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These figures reflect an increase in 13 Shore D units for the Pro V1 and 10 units for the Pro V1 going from an "off the ball" to an

"on the ball" measurement. Accordingly, there is no way one could reasonably assume that the "off the ball" measurement of 55 Shore D for the Nesbitt material would *necessarily* have an "on the ball" measurement of less than 64, an increase of only 9 Shore D units. Indeed, if anything, the data suggests the opposite. Because Acushnet has not shown that Nesbitt's outer cover would necessarily exhibit a Shore D hardness of 64 or less, its inherency argument fails as a matter of law.

As the Federal Circuit has made clear, inherency requires a showing that the allegedly inherent property is *necessarily* present. *Trintec*, 295 F.3d at 1295. The law is equally well-settled that "inherency may not be established by probabilities or possibilities." *Crown*, 289 F.3d at 1377; *see also Trintec*, 295 F.3d at 1297 ("Inherency does not embrace probabilities or possibilities."). Because the Surlyn 1855 datasheet does not disclose any on-the-ball hardness measurement, and because the hardness of Nesbitt's outer cover cannot necessarily be predicted from the plaque Shore D measurement that is reported in the datasheet, Acushnet cannot establish that Nesbitt's outer cover necessarily had, or would have, a Shore D hardness of 64 or less. At best, Acushnet can only show a possibility that Nesbitt's outer cover may have had this property, which, of course, is insufficient as a matter of law to prove inherency.

2. Neither the Proudfit Patent Nor the Ultra Tour Balata Golf Ball Anticipates Claim 1 or 2 of the '130 Patent.

Callaway Golf has asserted two claims, '130 claims 1 and 2, that do not specifically require polyurethane in the outer cover formulation. Rather, these claims require that the outer cover comprise "a relatively soft polymeric material selected from the group consisting of non-ionomeric thermoplastic and thermosetting elastomers." Consequently, Acushnet has argued that, together, the Proudfit patent and the Wilson Ultra Tour Balata golf ball (both of which

disclose or include a polybutadiene-balata outer cover layer) teach all the limitations of '130 claims 1 and 2.

In making this argument, however, Acushnet impermissibly interchanges aspects of the Proudfit patent and the Ultra Tour Balata golf ball, as if those two prior art references could be treated as one. Because the Proudfit patent and the Ultra Tour Balata ball are discrete, separate items of prior art, Acushnet's anticipation arguments based on these references fail because neither reference discloses a golf ball having *both* an outer cover layer having a Shore D hardness of 64 or less *and* a blend of low-acid ionomers in the inner cover layer.

a. Acushnet Cannot Show That Proudfit's Disclosure of a Balata Outer Cover Layer Inherently Discloses an Outer Cover Layer Having a Shore D Hardness of 64 or Less.

Acushnet has argued that Proudfit mentions the possibility of using "an outer layer of soft material such as balata." [Halkowski Decl. Ex. 14, Request for Inter Partes Reexamination of '130 Patent, at 17.] Since Proudfit discloses no Shore D hardness for a balata outer cover layer, however, Acushnet again resorts to an inherency argument, claiming that "[i]t was well known to people of ordinary skill in the art in 1995 that balata had a Shore D of less than 64." [Halkowski Decl. Ex. 17, 06/01/07 Robert Statz Expert Report, at 30 (chart).]

Acushnet, however, has offered no evidence that balata inherently has a Shore D hardness of "less than 64," either as a plaque or when formed into the outer cover layer of a golf ball. On the contrary, when asked about this issue, Acushnet's expert, Dr. Statz, stated that, because of balata's characteristics, it "was never formed into a plaque," and that he knew of no hardnesses for balata golf ball covers:

Q. Your statement here referring to the hardness of balata, are you -- it doesn't say whether you're talking about on the ball or off the ball. Is this -- should this be read one way or the other, or does it not matter, in your opinion?

- A. Well, it should have mattered, but -- I doubt if people measured the hardness of balata in a plaque because **balata was never formed into a plaque**. So they never would measure the hardness in a plaque. When I started the project on soft ionomers, I got a plaque from Wilson. And we measured modulus, but not hardness.

[Halkowski Decl., Ex. 8, 7/31/07 Robert Statz Dep. Tr. 277:17-278:5 (emphasis added).]

Dr. Statz further testified that his only knowledge of balata hardness, either as a plaque or on a golf ball, was Dr. MacKnight's report and an Acushnet report on the Shore D hardness of a Wilson Ultra Tour Balata ball. [Halkowski Decl. Ex. 8, Statz Dep. Tr. at 278:6-14.] However, neither of these sources provides any support for the argument that balata inherently – that is, *inevitably and necessarily* – has a Shore D hardness of 64 or less, either on a plaque or as a golf ball cover:

- First, Dr. MacKnight's report does not address, in any way, any golf ball cover comprising balata.
- Second, the Acushnet report Dr. Statz referred to was a test of a Wilson Ultra Tour Balata golf ball, which states that the "primary component" of the ball's cover was "c-polybutadiene," and that "synthetic balata" was present in the cover only as an "other polymer." [Halkowski Decl. Ex. 16, Acushnet Competitive Ball Report .] A cover in which balata is present only as a secondary component cannot serve as evidence of the inherent properties either of balata in general or of balata on a golf ball.

Thus, neither documentary evidence nor expert testimony supports Acushnet's allegation that balata, or an outer cover layer made of balata, would inherently have a Shore D hardness of 64 or less. Because of Acushnet's failure of proof, Callaway Golf is entitled to summary

judgment of no anticipation regarding the Proudfit prior art reference. *See Celotex*, 477 U.S. at 323.

b. Acushnet Has No Evidence That the Ultra Tour Balata Golf Ball Includes A Blend of Two or More Low-Acid Ionomers in the Inner Cover Layer.

Acushnet must demonstrate not only that Proudfit discloses the required hardness for the outer cover layer, as noted above, but that it discloses the other claim limitations, *as they are arranged in the asserted claims*. *See C.R. Bard, Inc. v. M3 Sys., Inc.*, 157 F.3d 1340, 1349 (Fed. Cir. 1998) ("[A] finding of anticipation requires that the publication describe all of the elements of the claims, arranged as in the patented device."); *Richardson v. Suzuki Motor Co., Ltd.*, 868 F.2d 1226, 1236 (Fed. Cir. 1989) (for anticipation, "[e]very element of the claimed invention must be literally present, as arranged in the claim"). Thus, Proudfit must be shown to disclose a ball that inherently exhibits the required hardness *and* has an inner cover layer comprising a blend of low-acid ionomers.

Acushnet argues that the Ultra Tour Balata golf ball has both these properties, but it has offered only speculation that the inner cover layer of that ball includes a blend of two or more low-acid ionomers. The only evidence Acushnet has offered regarding the Wilson Ultra Tour Balata's inner cover layer composition is a 1994 internal Acushnet test document that indicates that the ball had a sodium ionomer and a zinc ionomer in the inner cover layer. [Halkowski Decl. Ex. 16, Acushnet Competitive Ball Report.] From this document, Acushnet now infers, thirteen years later, that these two ionomers must be the specific blend of sodium and zinc *low-acid* ionomers that Proudfit discloses as one possible inner-cover layer formulation. Acushnet has presented no other proof on this point – Acushnet never took any discovery from Wilson (the company that manufactured and sold the Ultra Tour Balata), or from Mr. Proudfit, and has never

offered any test results, either from Acushnet or from an independent lab, to prove the content of the actual Ultra Tour Balata inner cover layer.

Even assuming that Acushnet's internally-generated report is true, the report still does not establish that the Ultra Tour Balata contains a blend of *low-acid* ionomers. At best, all it could prove is that the ball includes a blend of sodium and zinc ionomers. Sodium and zinc ionomers, however, may be either low-acid *or high-acid*. Proudfit's patent states:

Specific high modulus Surlyn's which can be used in the inner layer include 8220 (sodium), 8240 (sodium), 9220 (zinc), and AD-8181 (lithium).

[Halkowski Decl. Ex. 11, '187 patent, col. 6:16-18].] As Acushnet has acknowledged in one of its own patents, Surlyn 8220, 8240, and 9220 are all high-acid ionomers:

High acid ionomers typically contain from about 16% to about 30%, preferably 18.5%-21.5% and most preferably about 19% by weight acrylic or methacrylic acid. Some examples of suitable high acid SURLYNs include SURLYN 8220, SURLYN 8240 and SURLYN 9220.

[Halkowski Decl. Ex. 12, U.S. Patent No. 5,856,388, col. 7:9-14.] Thus, even accepting as true Acushnet's evidence that the Ultra Tour Balata contains a blend of sodium and zinc ionomers, that data says nothing about whether those ionomers are low-acid or high-acid formulations.

Because Acushnet has presented no proof that the Ultra Tour Balata golf ball includes a blend of low-acid ionomers in its inner cover layer, Acushnet cannot show either that the Ultra Tour Balata ball itself is anticipatory prior art, or that the outer cover hardness of the Ultra Tour Balata inherently discloses the hardness of a Proudfit outer cover layer over a blended-low-acid inner cover layer. Acushnet's failure of proof warrants a grant of summary judgment of no anticipation. *See Celotex*, 477 U.S. at 323 ("The plain language of Rule 56(c) mandates the entry of summary judgment against a party who fails to establish the existence of an element essential to that party's case, and on which that party will bear the burden of proof at trial.").

VI. CONCLUSION

For the reasons set forth above, Callaway Golf respectfully requests entry of partial summary judgment that:

- The Nesbitt '193 patent does not incorporate by reference any discussion of polyurethane in the Molitor '637 patent;
- The Nesbitt '193 patent does not anticipate any of the asserted claims;
- The Proudfit '187 patent does not anticipate claims 1 and 2 of the '130 patent; and
- The Wilson Ultra Tour Balata golf ball does not anticipate claims 1 and 2 of the '130 patent.

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CERTIFICATE OF SERVICE

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